IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	: Suder, et al.	Art Unit	: 2616
Serial No.	: 10/072,343	Examiner	: Hanh Nguyen
Filed	: February 7, 2002	Conf. No.	: 4155
Title	: QUALITY OF SERVICE IN A REMOTE TELEPHONE		

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SUPPLEMENTAL APPEAL BRIEF

This Supplemental Appeal Brief is filed in response to the Notification of Non-Compliant Appeal Brief dated November 13, 2007.

I. REAL PARTY-IN-INTEREST

The real party in interest is Estech Systems, Inc., which is the assignee of the entire right and interest in the present Application.

II. RELATED APPEALS AND INTERFERENCES

There are no appeals or interferences known to Appellants, the Appellants' legal representative, or assignee which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

III. STATUS OF CLAIMS

Claims 1-46 are pending in the Application.

Claims 35-46 are allowed.

Claims 1-34 stand rejected, and are hereby appealed.

IV. STATUS OF AMENDMENTS

There were no amendments to the claims or Specification filed after the Final Rejection.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Claim 1 recites an information handling system comprising a modem, a first telephony device coupled to the modem, and a first network device coupled to the modem through the first telephony device, wherein the first telephony device includes first circuitry for throttling data sent from the first network device. This is shown in Figure 3 with the modem 310 having a first telephony device 313 coupled to the modem 310, and a first network device 312 coupled to the modem 310 through the first telephony device 313. Page 7, line 2 – page 8, line 18. Figure 2 illustrates more detail regarding telephony device 313. Figure 4 illustrates a simplified flow diagram of how a jitter buffer throttles data packets received by the IP telephony device from the first network device. Page 11, line 11 – page 13, line 16.

Claim 16 claims an information handling system comprising a modem, a telephone coupled to the modem, and a workstation coupled to the modem through the telephone, the method comprising the steps of transferring data from the workstation to the telephone, wherein the data sent from the workstation is addressed for transmission to a network via the modem, communicating audio information between the telephone and the network, and sufficiently throttling the data sent from the workstation to the telephone to increase a rate of transfer of the audio information during the communicating step. Such an information handling system is again shown in Figure 3, where the modem 310, the IP telephone 313, and the workstation 312 are illustrated. Figure 4 also illustrates the process for throttling data sent from the workstation to the telephone while Figures 5 and 6 illustrate further processes for throttling such data using various throttling modes. Page 14, line 4 – page 15, line 22.

Claim 22 recites similar limitations as in Claim 16, where the modem is coupled to a wide-area network 201. Such a wide-area network is illustrated in Figure 3. Claim 22 claims an information handling system comprising a modem, a telephone coupled to the modem, and a workstation coupled to the modem through the telephone, the method comprising the steps of transferring data from the workstation to the telephone, wherein the data sent from the workstation is addressed for transmission to a network via the modem, communicating audio

information between the telephone and the network, and sufficiently throttling the data sent from the workstation to the telephone to increase a rate of transfer of the audio information during the communicating step. Such an information handling system is again shown in Figure 3, where the modem 310, the IP telephone 313, and the workstation 312 are illustrated. Figure 4 also illustrates the process for throttling data sent from the workstation to the telephone while Figures 5 and 6 illustrate further processes for throttling such data using various throttling modes. Page 14, line 4 – page 15, line 22.

Claim 30 recites a telephony device 313 comprising an input data port 815 for receiving data, where the data is addressed for transmission to a location other than the telephony device 313 through an output port 816 on the telephony device 313. Further illustrated in Figure 2 is circuitry for communicating information to and from the telephony device, with such circuitry including the various microphone 822, speaker 821, CODEC 819, handset 818, CODEC 817, DSP 801, FPGA 802, etc. for permitting a user to communicate information using the IP telephone 313. Page 9, line 3 – page 11, line 10. The jitter buffer is described with respect to Figure 7, and is implemented in software. This software is described in the specification in page 13, line 17 - page 14, line 3. The jitter buffer may be implemented in software within the DSP 801. Page 9, line 18 – page 10, line 12. The circuitry for throttling the data is implemented in software within the device 313, and as described in Figures 4-6.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

1. Claims 1-7 and 11-34 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Schuster et al.* (U.S. Patent No. 6,650,619) in view of *O'Mahony* (U.S. Patent No. 5,878,120).

2. Claims 8-10 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Schuster* in view of *O'Mahony* and further in view of *Beyda et al.* (U.S. Patent No. 6,980,569).

VII. ARGUMENTS

1. Claims 1-46 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Schuster et al.* (U.S. Patent No. 6,650,619) in view of *O'Mahony* (U.S. Patent No. 5,878,120). In response, Applicants respectfully traverse these rejections.

Claim 1 specifically recites a first network device coupled to the modem through the first telephony device, wherein the first telephony device includes first circuitry for throttling data sent from the first network device. The two cited references do not teach or suggest a telephony device coupling a network device to a modem. In *Schuster*, the network device and telephony device are separately connected to the PSTN.

Further, there is no need for throttling data sent from the first network device in *Schuster*. Thus, contrary to the rejection, there is no need to apply teachings of *O'Mahony* into *Schuster*.

Contrary to the rejection's citation of language in columns 13 and 14 of *Schuster*, *Schuster* does not teach throttling data sent from a first network device, wherein such throttling circuitry is included within a telephony device coupled between the first network device and a modem. Instead, *Schuster* merely discloses a reduction in signaling workload at a gateway device. *O'Mahony* may disclose a modem within a DCE, but it does not discuss throttling an amount of data being received, but instead will turn off a transference through the modem of non-voice data in favor of voice data.

As a result, there is no teaching or even a suggestion within the cited art of the specific configuration of the system recited in claim 1 where the first network device is coupled to the modem through the first telephony device, wherein the first telephony device includes throttling circuitry. One skilled in the art at the time the invention was made would not have been able to recreate the invention specifically recited in claim 1 in view of *O'Mahony* and *Schuster*. Instead, the most that the two references might suggest would be to suspend within gateway 12 the transmission to the network 22 of non-voice data from computer 24 in favor of voice data from telephony device 26. Again, however, this configuration is not the same as what is specifically recited within claim 1. Since all of the limitations of the claim are not met by the combination of the prior art references, a *prima facie* case of obviousness has not been proven.

To reiterate, claim 1 recites a modem. *Schuster* does not require a modem. If gateway 12 is replaced with an IP telephone as the Examiner has suggested, a modem is still not needed, since an IP telephone does not need the use of a modem to connect to a network. There is no need for a "missing modem" in *Schuster*, contrary to the assertion by the Examiner on page 11 of the office action. A modem might only be needed between devices 26 and 44 or between devices 24 and 44 within *Schuster*. However, modems in those locations do not meet the limitations of the claim.

The Examiner implies in the final office action on page 2 that Applicants acknowledge that a modem can be used to couple between device 26 and telephone 24 within *Schuster*. Applicants make no such acknowledgement or admission. Instead, Applicants merely state that a modem might be used between devices 26 and 44 or between devices 24 and 44. This is not the same as the network device coupled to the modem through the telephony device. The Examiner's assertion of what Applicants have acknowledged is not correct and still does not meet the limitations of the claims.

Claims 16 and 22 are patentable for reasons similarly given above with respect to claims 1 and 35. Furthermore, claim 16 recites that the data transferred from the workstation to the telephone is addressed for transmission to a network via the modem. The Examiner has not specifically addressed this claim language, and thus the claim is patentable since the Examiner has failed to prove a *prima facie* case of obviousness. Furthermore, claim 16 recites that the data is throttled sufficiently to increase a rate of transfer of the audio information during the communicating step. The Examiner has failed to specifically address this claim language, and thus has failed to prove a *prima facie* case of obviousness.

With respect to claim 30, this claim recites that the telephony device comprises an input data port for receiving data, wherein the data is addressed for transmission to a location other than the telephony device through an output port on the telephony device. The Examiner has asserted that computer 24 in *Schuster* discloses such a telephony device. This is an unreasonably broad interpretation of the teachings of *Schuster*. MPEP §2111. The Examiner asserts that a microphone on computer 24 is the input data port for receiving data. Voice signals are not data and one skilled in the art would not consider a microphone to be an input data port. Furthermore, the voice signals received by such a microphone are not addressed for transmission to a location

other than the telephony device. Furthermore, the Examiner has asserted that the workstation 24 in *Schuster* could be an IP telephone, but has failed to support such an assertion with any objective evidence provided within *Schuster*.

Claim 30 also recites a jitter buffer. All the Examiner has done is to assert that such a buffer is inherent within PC 24. A jitter buffer is not merely a memory, as has been argued by Applicants herein, and as supported within the Specification. This again is an unreasonably broad interpretation of a claim term by the Examiner. MPEP §2111. Claim 30 then recites circuitry for sufficiently throttling the data in response to a predetermined level being exceeded within the jitter buffer so that the communication of the information can be performed in real time. The Examiner has basically glossed over most of this claim language in the rejection. The Examiner asserts that a memory within PC 24 can be the jitter buffer, but has not in any way found a discussion within *Schuster* that such a memory would be monitoring a predetermined level of data to provide for the throttling of data. Furthermore, gateway 12 is not the same as PC 24, and the Examiner cannot combine these two to arrive at the claimed invention, since they are disclosed as structurally separate and different within the *Schuster* reference.

With respect to claim 31, this claim recites that the jitter buffer temporarily stores the information communicated to and from the telephony device. The Examiner now admits that *Schuster* does not disclose a jitter buffer that temporarily stores the information. Instead, the Examiner asserts that *O'Mahony* discloses in Figure 9 a modem comprising buffer 920 and 922 storing voice and data. Transmission data buffer 920 and transmission voice buffer 922 in Fig. 9 of *O'Mahony* are not the same or even similar to a jitter buffer. The Examiner is again making unreasonably broad interpretations of the claim limitations while attempting to match such limitations to the teachings of *Schuster* and *O'Mahony*. The same applies with respect to claim 34.

With respect to claims 20 and 21, nowhere is it disclosed or suggested within the cited prior art that management system 90 in *Schuster* monitors an amount of audio information received by the telephone. System 90 is not disclosed anywhere to occur within a jitter buffer. The limitations have not been met by the rejection. As a result, one skilled in the art at the time the invention was made would not have been able to recreate the invention specifically recited in

claims 20 and 21, since important limitations are not met by the combination of the cited prior art.

The Examiner is attempting to equate the gateway 12 with the telephone recited within claims 16 and 20. However, structurally and functionally, this configuration within *Schuster* does not meet the limitations of the claims. Under the Examiner's reasoning that the gateway 12 may be the telephone, then *Schuster* would have to disclose that the workstation 24 is coupled to a modem, which is not described in *Schuster* through the gateway 12. This does not make any sense.

With respect to claims 26 and 32, the Office Action has not explained how the recited language equates to level 2 switching circuitry. There is not even a mention of level 2 switching within either of the cited prior art references. As a result, the Office Action has failed to prove a *prima facie* case of obviousness in rejecting these claims.

Again, the Examiner has not in any way addressed the foregoing assertions by Applicants, in violation of MPEP §707.07(f).

Claims 2 and 29 specifically recite a router coupled between the first telephone device and the modem. The rejection glosses over this specific structural relationship by pointing to the router 64 in Fig. 1 of *Schuster* as being coupled to telephone 26. The rejection then asserts that "it would have been obvious to couple the router between the telephone device and the modem in the *Shuster et al.* [sic]." Such an obviousness assertion is without any objective support, which is required under the case law. Nothing in the prior art suggests coupling a router between the telephone device and the modem.

Again, the Examiner has not in any way addressed the foregoing assertions by Applicants, in violation of MPEP §707.07(f).

With respect to claims 7, 19, 23 and 24, Applicants respectfully assert that *Schuster* does not disclose that throttling circuitry is included in the telephony device.

Furthermore, the rejection has ignored significant claim limitations in claim 24. For this reason alone, the Examiner has failed to prove a *prima facie* case of obviousness in rejection claim 24. More specifically, claim 24 recites that the throttling step monitors a jitter buffer level to determine if the amount of data being transferred from the network device exceeds the predetermined threshold. The Examiner has not in any way addressed this claim limitation.

Again, the Examiner has not in any way addressed the foregoing assertions by Applicants, in violation of MPEP §707.07(f).

With respect to claim 14, Applicants respectfully assert that there are claim limitations in claim 14 that are not addressed in the rejection of claim 1. More specifically, claim 14 recites that the data sent from the first network device is sufficiently throttled so that the first telephony device can communicate real-time multimedia signals to and from the modem. These limitations are not specifically addressed by the Examiner. For this reason alone, the Examiner has failed to prove a *prima facie* case of obviousness in rejecting claim 14.

Again, the Examiner has not in any way addressed the foregoing assertions by Applicants, in violation of MPEP §707.07(f).

In the rejection of claims 25 and 27, the Examiner has asserted that *Schuster* discloses the network device equates to PC 24 and the telephone device equates to telephone 26. If this is so, then clearly *Schuster* does not disclose or suggest the specific limitations where the data is addressed for transmission from the network device through the telephony device to the wide area network via the modem.

Again, the Examiner has not in any way addressed the foregoing assertions by Applicants, in violation of MPEP §707.07(f).

2. Claims 8-10 stand rejected under 35 U.S.C. §103 as being unpatentable over *Schuster* in view of *O'Mahony* and further in view of *Beyda et al.* (U.S. Patent No. 6,980,569). In response, Applicants respectfully traverse this rejection. *Beyda* has nothing to do with what is recited within the claims. Thus, the jitter buffer described therein is not applicable to the presently claimed invention, nor does it operate in the same manner. As a result, one skilled in the art would not have combined *Beyda* with *Schuster* and *O'Mahony* to arrive at the claimed invention.

More specifically, claim 8 recites that the first telephony device includes circuitry for monitoring an amount of data addressed to and received by the first telephony device, wherein the first throttling circuitry reduces a future amount of data from being transferred from the first network device if the amount of data addressed to and received by the first telephony device falls below a predetermined threshold. One skilled in the art at the time the invention was made

would not have combined the teachings of *Beyda* into the teachings of *Schuster* and *O'Mahony* to arrive at these claim limitations. The Examiner is relying solely upon hindsight reasoning in combining these prior art references. The *O'Mahony* and *Schuster* references combined do not teach or suggest the limitations of claim 1, and merely adding a nonanalogous teaching from *Beyda* with *Schuster* and *O'Mahony* does not make the obviousness argument any more plausible.

Claim 9 recites that the monitoring circuitry comprises a jitter buffer where the predetermined threshold is a predetermined level within the jitter buffer. Again, the combination of the references does not meet the limitations of claims 1, 8 and 9 combined.

With respect to claim 10, the Examiner makes the unsupported assertion that it would have been obvious to use multiple throttling levels of *O'Mahony* into *Schuster* in order to adaptively adjust or change the throttling levels. There is no teaching or suggestion within these prior art references either singly or combined to make such a combination to arrive at the claimed invention. The Examiner is relying upon an unsupported opinion for his assertion of how the references may be combined. There is nothing within *Schuster* that would lead one skilled in the art to want to have multiple throttling levels, and there is nothing in *O'Mahony* that would lead one skilled in the art to combine its teachings into a network system such as disclosed in Figure 1 of *Schuster*.

Respectfully submitted,

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CLAIMS APPENDIX

1. [rejected] An information handling system comprising:

a modem;

a first telephony device coupled to the modem; and

a first network device coupled to the modem through the first telephony device, wherein the first telephony device includes first circuitry for throttling data sent from the first network device.

2. [rejected] The system as recited in claim 1, further comprising:

a router coupled between the first telephony device and the modem; and

a second network device coupled to the router through a second telephony device, wherein the second telephony device includes second circuitry for throttling data sent from the second network device.

3. [rejected] The system as recited in claim 2, wherein the router, modem, first telephony device, and first network device are coupled to each other via a network.

4. [rejected] The system as recited in claim 1, wherein the network is a TCP/IP network.

5. [rejected] The system as recited in claim 4, wherein the network is a packet switched network.

6. [rejected] The system as recited in claim 1, wherein the first telephony device communicates using an IP protocol.

7. [rejected] The system as recited in claim 1, wherein the first throttling circuitry reduces a future amount of data from being transferred from the first network device if the amount of data exceeds a predetermined threshold.

8. [rejected] The system as recited in claim 1, wherein the first telephony device includes circuitry for monitoring an amount of data addressed to and received by the first

telephony device, wherein the first throttling circuitry reduces a future amount of data from being transferred from the first network device if the amount of data addressed to and received by the first telephony device falls below a predetermined threshold.

9. [rejected] The system as recited in claim 8, wherein the monitoring circuitry comprises a jitter buffer where the predetermined threshold is a predetermined level within the jitter buffer.

10. [rejected] The system as recited in claim 8, wherein the first throttling circuitry has a plurality of throttling levels.

11. [rejected] The system as recited in claim 8, wherein the first throttling circuitry includes a mode level in which the first throttling circuitry should operate.

12. [rejected] The system as recited in claim 11, wherein the first throttling circuitry adjusts its level of throttling of the data in response to the mode level.

13. [rejected] The system as recited in claim 12, wherein the mode level is a most aggressive mode, wherein the first throttling circuitry will throttle the future amount of data sent from the first network device at a highest level in response to the mode level being in the most aggressive mode.

14. [rejected] The system as recited in claim 1, wherein the data sent from the first network device is sufficiently throttled so that the first telephony device can communicate real-time multimedia signals to and from the modem.

15. [rejected] The system as recited in claim 1, wherein the modem is operable for coupling to a wide area network.

16. [rejected] In an information handling system comprising a modem, a telephone coupled to the modem, and a workstation coupled to the modem through the telephone, a method comprising the steps of:

transferring data from the workstation to the telephone, wherein the data sent from the workstation is addressed for transmission to a network via the modem;

communicating audio information between the telephone and the network; and

sufficiently throttling the data sent from the workstation to the telephone to increase a rate of transfer of the audio information during the communicating step.

17. [rejected] The method as recited in claim 16, wherein the network is a TCP/IP network.

18. [rejected] The method as recited in claim 16, wherein the network is a packet switched network.

19. [rejected] The method as recited in claim 16, wherein the throttling step further comprises the step of reducing a future amount of data from being transferred from the workstation if the amount of data exceeds a predetermined threshold.

20. [rejected] The method as recited in claim 16, wherein the throttling step further comprises the step of monitoring an amount of the audio information being received by the telephone.

21. [rejected] The method as recited in claim 20, wherein the monitoring step further comprises the step of monitoring a predetermined level within a jitter buffer.

22. [rejected] In an information handling system comprising a telephony device coupled between a network device and a modem, wherein the modem is coupled to a wide area network, a method comprising the steps of:

transferring data from the network device to the telephony device where the data is addressed for transmission through the telephony device to the wide area network via the modem;

communicating multimedia information between the telephony device and the wide area network; and

sufficiently throttling the data from the network device to the telephone device to increase available bandwidth for communication of the multimedia information between the telephony device and the wide area network.

23. [rejected] The method as recited in claim 22, wherein the throttling step reduces a future amount of data from being transferred from the network device to the telephony device if an amount of data being transferred from the network device exceeds a predetermined threshold.

24. [rejected] The method as recited in claim 23, wherein the throttling step monitors a jitter buffer level to determine if the amount of data being transferred from the network device exceeds the predetermined threshold.

25. [rejected] The method as recited in claim 23, wherein the network device is a workstation and the telephony device is a digital telephone.

26. [rejected] The method as recited in claim 23, wherein the telephony device is an IP telephone with level 2 switching circuitry.

27. [rejected] The method as recited in claim 26, wherein the network device is a workstation.

28. [rejected] The method as recited in claim 27, wherein the modem communicates the data and the multimedia information to the wide area network.

29. [rejected] The method as recited in claim 28, wherein a router is coupled between the modem and telephony device.

30. [rejected] A telephony device comprising:

an input data port for receiving data, wherein the data is addressed for transmission to a location other than the telephony device through an output port on the telephony device;

circuitry for communicating information to and from the telephony device;

a jitter buffer; and

circuitry for sufficiently throttling the data in response to a predetermined level being exceeded within the jitter buffer so that the communication of the information can be performed in real-time.

31. [rejected] The telephony device as recited in claim 30, wherein the jitter buffer temporarily stores the information.

32. [rejected] The telephony device as recited in claim 30, further comprising:

level 2 switching circuitry for handling the information and data.

33. [rejected] The telephony device as recited in claim 30, wherein the data and the information are communicated using IP protocol.

34. [rejected] The telephony device as recited in claim 30, wherein the predetermined level in the jitter buffer is an amount of the information temporarily stored in the jitter buffer.

35. [allowed] A system comprising:

a wide area network ("WAN");

a first modem for coupling to the WAN;

a first IP telephone coupled to the first modem;

a first network device coupled to the first modem via the first IP telephone so that data communicated between the first network device and the first modem is switched through the first IP telephone; and

a second IP telephone coupled to the WAN,

wherein the first IP telephone includes circuitry for throttling the data communicated between the first network device and the first modem so as to increase a bandwidth in a connection coupling the first IP telephone to the first modem.

36. [allowed] The system as recited in claim 35, wherein multimedia information communicated between the WAN and the first IP telephone and the data travel over the connection coupling the first IP telephone to the first modem.

37. [allowed] The system as recited in claim 36, wherein the multimedia information and the data occupy the same bandwidth between the first IP telephone and the first modem.

38. [allowed] The system as recited in claim 35, further comprising:

a router coupling the first IP telephone to the first modem.

39. [allowed] The system as recited in claim 38, further comprising:

a third IP telephone coupled to the router;

a second network device coupled to the first modem via the third IP telephone so that data communicated between the second network device and the first modem is switched through the third IP telephone,

wherein the third IP telephone includes circuitry for throttling the data communicated between the second network device and the first modem so as to increase a bandwidth in a connection coupling the third IP telephone to the first modem.

40. [allowed] The system as recited in claim 37, wherein the multimedia information is communicated over the WAN between the first and second IP telephones.

41. [allowed] The system as recited in claim 35, further comprising:

a second modem for coupling to the WAN, wherein the second IP telephone is coupled to the second modem; and

a second network device coupled to the second modem via the second IP telephone so that data communicated between the second network device and the second modem is switched through the second IP telephone,

wherein the second IP telephone includes circuitry for throttling the data communicated between the second network device and the second modem so as to increase a bandwidth in a connection coupling the second IP telephone to the second modem.

42. [allowed] The system as recited in claim 35, further comprising:

a router coupled to the WAN;

a hub coupled to the router, wherein the second IP telephone is coupled to the router via the hub; and

a second network device coupled to the hub via the second IP telephone,

wherein the second IP telephone includes circuitry for throttling the data communicated between the second network device and the hub so as to increase a bandwidth in a connection coupling the second IP telephone to the hub.

43. [allowed] The system as recited in claim 42, further comprising:

a data server coupled to the hub, wherein the data is communicated between the second network device and the data server.

44. [allowed] The system as recited in claim 43, wherein data is also communicated between the first network device and the data server over the WAN.

45. [allowed] The system as recited in claim 42, further comprising:

a multimedia server for communicating multimedia information between the second IP telephone and public switched telephone network.

46. [allowed] The system as recited in claim 45, wherein multimedia information is also communicated between the first IP telephone and the public switched telephone network over the WAN and via the multimedia server.

EVIDENCE APPENDIX

No evidence was submitted pursuant to §§1.130, 1.131, or 1.132 of 37 C.F.R. or of any other evidence entered by the Examiner and relied upon by Appellants in the Appeal.

RELATED PROCEEDINGS APPENDIX

None.